DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-003936
Date Inspected: 19-Sep-2008

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 630
OSM Departure Time: 1530
Location: Shanghai, China

CWI Name:	Lvliqing and Huang Wen Pang	**CWI Present:**	☑ Yes ☐ No
Inspected CWI report:	☐ Yes ☑ No ☐ N/A	**Rod Oven in Use:**	☑ Yes ☐ No ☐ N/A
Electrode to specification:	☑ Yes ☐ No ☐ N/A	**Weld Procedures Followed:**	☑ Yes ☐ No ☐ N/A
Qualified Welders:	☑ Yes ☐ No ☐ N/A	**Verified Joint Fit-up:**	☑ Yes ☐ No ☐ N/A
Approved Drawings:	☑ Yes ☐ No ☐ N/A	**Approved WPS:**	☑ Yes ☐ No ☐ N/A
		Delayed / Cancelled:	☐ Yes ☑ No ☐ N/A

Bridge No: 34-0006
Component: OBG and SAS Tower Fabrication

Summary of Items Observed:

On this date, Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector Joselito Lizardo was present as requested to perform observations on the fabrication of Orthotropic Box Girder (OBG) and SAS Tower at Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China.

The QA Inspector has randomly observed the following activities on sub-assembly Bays mentioned below;

Bay 7: OBG - Floor Beam Sub Assembly
This QA randomly observed ZPMC welder Lui Kaige ID #044830 utilizing the FCAW Process with a 1.4mm diameter electrode, filler metal brand E71T-1, class Supercored 71H in the 1G (Flat Groove) Position with ZPMC WPS WPS-B-T-2231-B-U2-F-1 to weld CJP fill pass on flange splice butt joint on FB003-097-104. The QA Inspector randomly observed ZPMC CWI Huang Wen Pang monitoring preheat and weld parameters.

The QA Inspector randomly observed ZPMC welder ID Number 044780 utilizing the SAW Process in the 1G (Flat Groove) Position with ZPMC WPS WPS-B-T-2221-B-L2c-S-2, to weld the cover pass on (12mm:30mm unequal thickness) plate splice butt joint of floor beam sub-assembly FB014-027-002. QA Inspector randomly observed ZPMC CWI Huang Wen Pang monitoring weld parameters.

This QA observed ZPMC personnel ground/chased 8-transverse linear indications that were previously rejected dated 8.05.2008 on floor beam joints FB016-008-009(1-transverse indication), FB016-008-003(6-transverse indications) and FB016-008-012(1-transverse indication). These ground/chased indications have been MT'd by ZPMC/NDE then confirmed by this QA prior welding. This floor beam is being repaired per welding repair

request B-CWR153.

This QA observed ZPMC/NDE personnel perform MT on fillet welds of floor beam FB001-006-017/018, 015, 016 and FB078-001-004, 011. This QA also perform 10% MT on these mentioned floor beams and found deem acceptable.

Bay 8: Tower Diaphragm
This QA observed three ZPMC welders ID #045246, ID #045133 and ID #068924 SMAW(2G) PJP welding fill pass on 40mm web plate to tower double diaphragm(bottom) NSD1-SA334B/B weld joints 6, 11 and 12. ZPMC welders were noted utilizing Excalibur E9018M H4R, 4.8mm diameter electrode following WPS-B-T-3312-Tc-P5. The QA Inspector randomly observed ZPMC CWI Lvliqing monitoring weld parameters.

The QA Inspector randomly observed ZPMC welder ID Number 045247 utilizing the SAW Process in the 1G (Flat Groove) Position with ZPMC WPS WPS-B-T-3221-B-U3c-S-1, to weld the fill pass on 75mm thick plate splice butt joint of tower diaphragm plate splice butt joint due to cutting error on NSD1-SA196A/B-18B. QA Inspector randomly observed ZPMC CWI Lvliqing monitoring preheat and weld parameters.

This QA performed 10% MT on the following weld joints of tower double diaphragm and found deem acceptable;

a) ESD1-SA301A/B-2 - tower diaphragm plate to diaphragm flange
b) ESD1-SA301B/B-5 - 40mm web plate to tower diaphragm plate
c) ESD1-SA301B/B-6 - 40mm web plate to tower diaphragm plate
d) ESD1-SA301B/B-1 - 40mm web plate to tower diaphragm plate
e) ESD1-SA301B/B-2 - 40mm web plate to tower diaphragm plate
f) ESD1-SA301B/B-9 - 60mm stiffener plate to tower diaphragm plate
g) ESD1-SA301B/B-10 - 60mm stiffener plate to tower diaphragm plate
h) ESD1-SA301B/B-13 - 60mm stiffener plate to tower diaphragm plate
i) ESD1-SA301B/B-14 - 60mm stiffener plate to tower diaphragm plate

Summary of Conversations:
No significant conversation ocurred today.
Comments
This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, (858) 232-7081, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer